



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/735,537 | 12/14/2000 | Alan F. Graves | 13552 | 6554 |
| 293 | 7590 | 10/07/2004 | EXAMINER | |
| DOWELL & DOWELL PC 2111 Eisenhower Ave. Suite 406 Alexandria, VA 22314 | | | PAYNE, DAVID C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2633 | |

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,537

Applicant(s)

GRAVES ET AL.

Examiner

David C. Payne

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27, 39, 40, 43-45, 50-61 and 63-71 is/are pending in the application.
4a) Of the above claim(s) 28-38, 41, 42 and 46-49 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 2, 10-15, 17, 18, 20-26, 59 and 70 is/are rejected.
7) ☒ Claim(s) 3-9, 16, 19, 27, 39, 40, 43-45, 50-58, 60 and 71 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 8 July 2004 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8 July 2004 have been fully considered but they are not persuasive. Applicant's argument with respect to the Fatehi reference is not persuasive. Fatehi teaches a system of connection verification, which obviously correlates input and output signals in order to determine a correlation, the mechanism of a message as applicant contends does not in any way buttress his argument.

Allowable Subject Matter

2. Claims 3-7, 16, 19, 27, 39, 40, 43, 44, 45, 50-58, 60, and 71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 61 and 63-69 are allowed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2633

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 11-15, 17, 18, 20-26, 59 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatehi et al. US006600581B1 (Fatehi).

Regarding claim(s) 1, 24 Fatehi disclosed

A system for verifying connections established through a switching unit adapted to receive a plurality of input signals and output a plurality of switched signals (e.g., col./line: 2/57-67), comprising: a selection unit for controllably admitting individual ones of the input signals and individual ones of the switched signals (figure 1 #102, e.g., col./line: 8/4-22); and a verification unit (figure 1 #102, e.g., col./line: 8/4-22) connected to the selection unit, for controlling operation of the selection unit as a function of a connection map (figure 1 #103) and performing operations (figure 5, e.g., col./line: 7/50-67) on the signals admitted by the selection unit so as to identify connections established through the switching unit and determine their consistency with the connection map.

Fatehi does not disclose performing relative-delay-dependent signal processing. However, it would have been obvious to one of ordinary skill in the art at the time of invention a relative-delay-dependent signal processing is performed on the Fatehi invention since a time delay is required to perform the operations of checking tag information against a connection map as shown in figure 5.

Art Unit: 2633

Regarding claim(s) 15, 20, 21, 25-26, 59, 70

Fatehi further disclosed a method/system of

determining a level of correlation (figure 5 #505, Yes branch) or anti-correlation (figure 5 #505, No branch) between the selected input signal and the switched signal expected to be correlated with the selected input signal; and if the level of correlation is significant or the level of anti-correlation is insignificant, concluding that the connection involving the selected input signal is consistent with the connection map (e.g., col./line: 8/10-20).

Regarding claim(s) 22, 23

Fatehi further disclosed

Computer-readable media tangibly embodying a program of instructions executable by a computer to perform a method of validating connections established through a switching unit adapted to receive a plurality of input signals and output a plurality of switched signals (e.g., col./line: 9/10-30, 9/52-67, 10/1-5).

Regarding claim(s) 2

Fatehi further disclosed

a switching core for switching a plurality of input optical signals as a function of a connection map and outputting a plurality of switched optical signals (figure 1 #101)

Regarding claim(s) 11 and 12,

Fatehi further disclosed wherein the selection unit comprises means for causing conversion

Art Unit: 2633

of the input and switched signals from optical to electrical format and thereby reducing bandwidth (Figure 11 #1140).

Regarding claim(s) 13, 17

Fatehi further disclosed wherein the selection unit (Figure 1 #150) comprises circuitry for admitting an input signal as a function of an input wavelength and an input port and for admitting a switched signal as a function of a switched wavelength and a switched port (e.g., col./line: 4/28-45).

Regarding claim(s) 14, 18

Fatehi does not disclose wherein the relative-delay-dependent signal processing operations are performed on low-frequency portions of the input signals and switched signals. However, it would have been obvious to one of ordinary skill in the art at the time of invention to perform the switched operation on all portions of the input signals since they are all components of the signal and would naturally be switched with the entire signal.

6. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fatehi et al.

US006600581B1 (Fatehi) in view of Kusyk US 6,246,668 B1 (Kusyk).

Regarding claim(s) 10, 63

Fatehi does not disclose disclosed

Art Unit: 2633

wherein the selection unit comprises an arrangement of at least one first multiplexer for allowing selection of the one or more input signals and at least one second multiplexer for allowing selection of the one or more switched signals. Kussyk disclosed a multiplexer (Figure 6A, 6B) used in the selection of signals. it would have been obvious to one of ordinary skill in the art at the time of invention to use the Kussyk multiplexer for selecting signals in the Fatehi apparatus since multiplexers are commonly used to feed multiple inputs into a single output.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/735,537

Page 7

Art Unit: 2633

Dcp

David C. Payne
DAVID C. PAYNE
AU 2633